

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

**Amendments to the Claims:**

Claims 1-16 are pending in this application. Claims 1 and 14 are independent.

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1 (CURRENTLY AMENDED): A measuring device, comprising:

a diffraction grating for diffracting incident light to resolve the light into a plurality of diffraction lights having different orders;

~~a first detecting means~~ detector for measuring ~~detecting~~ an intensity of a ~~predetermined~~ diffraction light of a predetermined order, of the said plurality of diffraction lights, which is not being reflected by an object to be measured; and

~~a second detecting means~~ detector for measuring an intensity of a diffraction light of an order different from the predetermined order, of said plurality of diffraction lights, which is being reflected by the object to be measured ~~other than the diffraction light received by said first detecting means, and being reflected by an object to be measured;~~

~~wherein a result of measurement by said second light detecting means is corrected using a result of measurement by said first detecting means.~~

2 (CURRENTLY AMENDED): A measuring device according to claim 1, wherein the diffraction light to be detected by said second ~~detecting means~~ detector is zero-th order diffraction light diffracted by said diffraction grating.

3 (PREVIOUSLY PRESENTED): A measuring device according to claim 1, further comprising a spectroscope for making the light to be projected upon said diffraction grating, into

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approximately monochromatic light.

4 (CURRENTLY AMENDED): A measuring device according to claim 1, further comprising a condensing mirror provided between said diffraction grating and said first detector ~~detecting means~~.

5 (ORIGINAL): A measuring device according to claim 4, wherein said condensing mirror comprises one of a concave-surface toroidal mirror, a cylindrical mirror, a spherical mirror, and a revolutionally elliptical-surface mirror.

6 (CURRENTLY AMENDED): A measuring device according to claim 4, wherein, in a plane containing central axes of incident light and reflected light upon and from said condensing mirror, said diffraction grating and said first detector ~~detecting means~~ are approximately conjugate with each other with respect to the condensing mirror.

7 (ORIGINAL): A measuring device according to claim 1, wherein said diffraction grating is a plane diffraction grating of laminar type or blaze type.

8 (PREVIOUSLY PRESENTED): A measuring device according to claim 3, wherein the approximately monochromatic light is one of EUV light, soft x-rays, and x-rays.

9 (ORIGINAL): A measuring device according to claim 3, further comprising a curved-surface reflection mirror disposed between said spectroscope and said diffraction grating.

10 (PREVIOUSLY PRESENTED): A measuring device according to claim 9, wherein, in a plane containing central axes of incident light and reflected light upon and from said curved-

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surface reflection mirror, an exit pupil of said spectroscope and said diffraction grating are approximately conjugate with each other with respect to said curved surface reflection mirror.

11 (CURRENTLY AMENDED): A device according to claim 1, wherein a change in a result of measurement of said second detecting means due to a change in an intensity of rays emitted from a light source and incident on said diffraction grating is compensated using a result of measurement of said first detector ~~detecting means~~.

12 (CURRENTLY AMENDED): A device according to claim 1, further comprising a concave reflection mirror, disposed between said diffraction grating and said first detector ~~detecting means~~ for providing a conjugate relation between said diffraction grating and said first detector ~~detecting means~~, wherein the incident light comprises a plurality of different wavelengths.

13 (CANCELLED):

14 (CURRENTLY AMENDED): A measuring device ~~[[,]]~~ according to claim 1 further comprising ~~[[:]]~~

~~a diffraction grating for diffracting incident light to resolve the light into a plurality of diffraction lights having different orders;~~

~~first detecting means for measuring an intensity of a predetermined diffraction light, of the plurality of diffraction lights;~~

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~~second detecting means for measuring an intensity of a diffraction light other than the diffraction light received by said first detecting means, and being reflected by an object to be measured; and~~

a concave ~~reflection~~ reflecting mirror, disposed between said diffraction grating and said first ~~detecting means~~ detector, for providing a ~~substantial~~ substantially conjugate ~~relation~~ relationship between said diffraction grating and said first detector ~~detecting means~~;

~~wherein the incident light comprises a plurality of different wavelengths.~~

15 (CURRENTLY AMENDED): A device according to claim 14, wherein zero-th order diffraction light emergent from said diffraction grating is directed to said second detector ~~detecting means~~.

16 (CANCELLED):